



NOTES:

1. THIS IS A ULTRA- HIGH VACUUM COMPONENT (UHV)
2. WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
 - A) CIMCOOL 5 STAR 49
 - B) TRIM SOL
3. FINISHING: WHEN MACHINING VACUUM PARTS USE OF ABRASIVE PAPER OR SANDING DISCS, BUFFING OR POLISHING COMPOUNDS, OR RESIN-BONDED GRINDING WHEELS IS PROHIBITED
4. CLEANING: THE COMPONENT MUST BE CLEANED SUCH THAT A UHV PRESSURE OF 1×10^{-9} TORR CAN BE ACHIEVED
5. HANDLING: THE COMPONENTS SHALL BE HANDLED WITH WHITE SILK GLOVES AND WRAPPED WITH ALUMINUM FOIL TYPE DRY ANNEAL AND UNDER CLEAN ROOM CONDITIONS
6. DIMENSIONS IN [] ARE MILLIMETERS AND FOR REF. ONLY
7. DIMENSIONS IN () ARE FOR REF. ONLY

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
PARTS LIST				
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		THIS DRAWING IS THE PROPERTY OF		
TOLERANCES DECIMALS .X - .1 [2.5] .XX - .01 [0.25] .XXX - .005 [0.13] ANGULAR - 0°30' SURFACE ROUGHNESS 125 REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX. SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1 DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5		LOG NUMBER P4420104-00 ARGONNE NATIONAL LABORATORY UNIVERSITY OF CHICAGO		
DRAWN BY MUSCIA CHECKED BY J. CHANG DESIGNER CHANG/MUSCIA RESPONSIBLE ENGINEER J. CHANG		DATE 7/14/99 DATE 12/9/99 DATE 7/14/99 DATE 12/9/99 CHIEF DESIGN ENGINEER D. SHU GP LEADER T.M. KUZAY PROJECT MGR. APPROVED/RELEASED		
MATERIAL 304 STAINLESS STEEL		DATE 12/18/99 DATE 1/13/00 DATE TITLE ADVANCED PHOTON SOURCE P4-40 INTEGRAL SHUTTERS FOR 4-ID-B RIB BAR		
SCALE 1:1		SIZE B		
SHEET 14		DRAWING NUMBER P4-420104-00		

DO NOT SCALE DRAWING